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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,303	11/18/2003	Richard Bernert	VOI0280.US	6927

7590

01/31/2005

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EXAMINER
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TADESSE, YEWEBDAR T

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/716,303

Applicant(s)

BERNERT ET AL.

Examiner

Yewebdar T Tadesse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 12-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/5/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is intended by "a curvature radius". As shown in Fig. 1, R is the radius of the support roll 40. For the purpose of examination, the radius of the support roll is assumed.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-6, 15 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP2000-176344 (see Abstract and computer translated description of the invention). As to claim 1, JP'344 discloses (see Figs 1 and 3 and Abstract) a device for direct application of liquid onto a moving application surface (web) comprising an applicator (head 1) and a weakening device (member 21) located prior to the applicator as viewed in the direction of travel, the weakening device (21) removes a boundary of air adjacent to the web, the weakening device (member 21) including a blowing device

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(air blast means 23), producing an air flow in opposite direction to the conveyance direction (see paragraph 16), located prior to the applicator as viewed in the direction of travel; and a suction device (air attraction means 24) for drawing in air. With respect to claim 2, in JP'344 the material web is a paper web (see paragraph 1). As to claims 4-6, in JP'344 the application surface (web 11) has first and second lateral edges and JP'344 shows (see Fig. 3) blow box (23) capable of supplying air to both areas of the lateral edges; and a suction box (24) is capable of exhausting air in one of the area of the lateral edges. Additionally, the suction box (24) is capable of having a drive side edge (edges of the slit 24a). As to claims 15 and 18, JP'344 discloses area subtended by the weakening device or area of the blow nozzle (23) wherein the area of the application surface takes on a curved progression (see Fig 1). With respect to claim 19, in JP'344 the application surface is fed from below a point of contact of the coating medium on the application surface to the point of contact of the coating medium on the application surface (see Fig 1).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 7 and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP2000-176344. JP'344 device is capable of having support roll with claimed radius and a blowing device end arranged at a distance as claimed from a point of contact of the coating medium. Arranging the blowing device and a point of contact of the coating medium at a certain distance in-between; and sizing the radius of the support roll are design choices. One in the art would size the roller and arrange the blowing device in relation to the contact of the coating medium as claimed, depending the size or thickness of the material web. It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the end of the blowing in relation to the contact of the coating medium at a distance of between 10 mm and 50mm; and the radius of the transfer roll between 300mm and 500mm depending the size or thickness of the web material processed.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'344 as applied to claim 1 above and further in view of Hess et al (US 6,309,463). JP'344 lacks

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teaching an indirect application of liquid onto a moving web having a transfer roll for transferring the coating medium onto the web. Hess et al teaches a device for direct or indirect application of liquid using a transfer roll (applicator roll 112) for transferring the coating medium to the surface of the material web (see Fig 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a transfer roll for transferring the coating medium to the web in JP'344 as desired.

9. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'344 as applied to claim 1 above and further in view of Koskinen et al (US 6,106,902). JP'344 lacks teaching a blowing device including a baffle located at a predetermined distance from the application surface. Koskinen et al discloses (see column 7, lines 38-64) a baffle (doctor blade) arranged in the immediate vicinity of the spray-coater used to remove air film from the web surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to alternatively use a baffle arranged in the predetermined distance from the application surface in JP'344 to efficiently remove the air film traveling along with the web as taught by Koskinen et al. With respect to the length of the baffle subtending part of the application surface and the arrangement of the suction device in relation to the baffle or the blowing device, they are design choices. One in the art would size the baffle and arrange the suction device in relation to the baffle and the blowing device as claimed, depending the size or thickness of the material web. It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the suction device relative to the

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baffle or blowing device at a distance of between 0 mm and 50mm; and the length of the baffle between 300mm and 500mm depending the size or thickness of the web material processed.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'344 as applied to claim 1 above and further in view of Nissinen et al (US 2004/0074440). JP' lacks teaching a blowing device including slotted nozzle and a multitude of individual nozzles. Nissinen et al discloses (see paragraph 26) a blowing device including an air jet slot nozzle (18) and a plurality of air jet nozzles (17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an air jet slot nozzle and a plurality of jet nozzles in JP'344 to directly impinge the air at desired place and to prevent the accumulation of the web treatment substance on structures above the spray nozzles respectively as taught by Nissinen et al.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'344 as applied to claim 1 above and further in view of Kusterman (US 6,322,627). JP'344 discloses the area of application surface including a support roll (10) and a support belt (11), wherein the material is routed around one of the support roll and the support belt. JP'344 lacks teaching a support shoe to rout the web material. However, it is well known in the art to use a support shoe for disposing web material around it; for instance -Kusterman discloses support shoes (126) as a backing element in supporting the web material. It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to include a support shoe in JP'344 to prevent formation of wrinkles in the material web as taught by Kusterman (see column 1, lines 44-61).

***Allowable Subject Matter***

12. Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: In Fig 4, JP'344 shows additional suction device 25. However in JP'344 the conditioning device (additional suction device) is not provided prior to the weakening device of the type described in Fig 3. Prior art of record does not disclose or suggest a device for the application of liquid coating medium onto a moving surface comprising, among others, a conditioning device prior to the weakening device as viewed in the direction of travel of the material web.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4:30 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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